REMARKS

In the Final Office Action that was mailed June 25, 2007, the Examiner maintained the rejections of pending claims 1-14. Applicants have amended claims 1 and 8 to more particularly define the subject matter sought to be patented. The amendments add no new matter, and support for the amendments can be found throughout Applicants' specification as originally filed, for example at figures 21-24 and at page 41, line 23 to page 44, line 6.

Claims 1-14 remain pending, and Applicants respectfully request reconsideration in view of the above amendments and the following remarks.

Response to Double-Patenting Rejection

The Examiner maintained the provision rejection of claims 1, 2, and 4-6 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 3, 6, and 7 of copending Application No. 10/646,428.

Applicants note the Examiner's concern, and will address the issue by filing a terminal disclaimer at an appropriate future time if and when claims 1, 2, 3, 6 or 7 from copending Application No. 10/646,428 issue.

Response to Claim Rejections – 35 U.S.C. § 102

The Examiner rejected claims 1-14 under 35 U.S.C. § 102(b) as being anticipated by published document "UIML: An XML Language for Building Device-Independent User Interfaces," by Marc Abrams and Contanrinos Phanouriou (hereinafter, "UIML"). Of these, claims 1, 8 and 9 are independent. Dependent claims 2-7 depend from claim 1, and dependent claims 10-14 depend, either directly or indirectly, from claim 9.

Without prejudice, Applicants have amended independent claims 1 and 8 to more particularly define the subject matter sought to be patented. The amendments add no new matter. Support for the amendments can be found throughout Applicant's specification as originally filed (e.g., at figures 21-24, and at page 41, line 24 to page 45, line 23).

Claims 1-7

UIML discloses a language that represents an interface in five parts: the interface structure, presentation style, content, actions taken in response to user interaction, and interconnection of the interface to application logic. (page 1, Abstract section). There are five main elements in a UIML document. (page 4, UIML – Main Elements section). A structure element includes an enumeration of the set of interface parts comprising the interface, where each part is given an instance name and a class name. (page 4, UIML – Main Elements section). A content element specifies the content. (page 4, UIML – Main Elements section). A behavior element describes the behavior of the interface when the user interacts with it, and has an enumerated set of conditions and associated actions. (page 5, UIML – Main Elements section). A style element specifies presentation style that is device-specific for each class of interface parts, or for individual named instances of a class. (page 5, UIML – Main Elements section). A peers element specifies what widgets in the target platform and what methods or functions in scripts, programs, or objects in application logic are associated with the user interface. (page 5, UIML – Main Elements section).

Applicants submit that claim 1 defines subject matter that is patentable over UIML because UIML does not disclose or suggest all of the elements recited in Applicants' claim 1. For example, UIML does not disclose or suggest a method that includes "receiving, by the device, an application specification document that includes a statement with an indication to render the first and second objects in the assembly," and "interpreting the statement of the application specification document using the interpreter to identify a presentation pattern for the assembly that defines a relation between at least two objects, the presentation pattern identified according to the type of the device from predefined first and second presentation patterns." Also, UIML fails to disclose or suggest "rendering the assembly of the first and second objects on the user-interface according to the [identified] presentation pattern."

UIML, by contrast, discloses methods that are very different than the method recited in Applicants' claim 1, and Applicants disagree with the Examiner's contention that UIML discloses the features recited in claim 1. First, with regard to a "presentation pattern," the Examiner states that "UIML does disclose presentation pattern since it's displaying data on multiple devices of its (device) own natural language," at page 3 of the present Office Action,

and refers to the section discussing UIML as a meta language at page 5 of UIML, citing "UIML document specifies a mapping of . . . names to a vocabulary specific to a particular target platform." *See* Office Action, page 11. This is insufficient to anticipate a "presentation pattern defining a relation between at least two objects," as recited in amended claim 1, as there is no disclosure or suggestion of a first object, a second object, or a relation between the two objects. Similarly, there is no disclosure or suggestion of "predefined first and second presentation patterns," nor identification of a presentation pattern "according to the type of the device from predefined first and second presentation patterns," as recited in claim 1. Next, with regard to "rendering the assembly of the first and second objects . . . according to the presentation pattern," the Examiner relies on page 3 of UIML, and cites "Java interpretive renderer permits the entire UIML interface to appear as a Java bean . . .end-user devices." *See* page 12 of Office Action. This is incorrect. Nowhere in UIML is an assembly of first and second objects rendered according to a presentation pattern disclosed or suggested. As described above, first and second objects are not disclosed or suggested, presentation patterns or predefined presentation patterns are not disclosed or suggested, and an assembly of the first and second objects according to a presentation pattern are not disclosed or suggested.

By way of example, figure 21 of Applicant's specification shows illustrative representations of presentation patterns, including patterns 295 and 296 that define, respectively, adjacent and overlap relations between a first object 360 and a second object 370 that may be rendered visually, and pattern 297, which defines a consecutive relation between two objects that may be rendered aurally. *See* Figure 21; page 41, line 23 to page 42, line 5. Examples of rendered assemblies of first and second objects on user interfaces according to presentation patterns that define, respectively, adjacent and overlap relations between the objects are shown in Figures 23 and 24. (Figure 23-24; page 44, line 29 to page 45, line 17). For example, the rendered assembly in each case includes the first and second objects according to a presentation pattern that defines a relation between at least two objects, and identified according to the type of the device from predefined first and second presentation patterns – in these examples, the size of the display screen being the device parameter that permits identification of the appropriate presentation pattern. (Figures 23-24, page 45, lines 3-23)

Figure 1 of UIML merely shows a PC with a display in English and a cell phone with a display in French. For either of the devices shown in figure 1, UIML does not disclose or suggest a first object and a second object, a presentation pattern that defines a relation between at least two objects, or an assembly of the first and second objects rendered according to the presentation pattern. Figure 1 does not show an assembly of the first and second objects rendered on a user interface of either device shown there, and indeed fails to show even one object, let alone an assembly of two objects rendered according to a presentation pattern that defines a relation between the objects. The discussion at page 5 of UIML pertains to a mapping of class names to a vocabulary for a target platform, which is simply a mechanism to standardize naming conventions such that "users can define vocabularies that are suitable for various toolkits independently of UIML." *See* UIML, page 5. As examples of class names, UIML lists "Frame, Menu, and Button," for a Java AWT target. *See* UIML, page 5. Even if such class names may correspond to objects, which Applicants do not concede, they certainly are not a "presentation pattern defining a relation between at least two objects," or an "assembly of the first and second objects on the user-interface according to the presentation pattern," as recited in Applicants' claim 1.

Neither does UIML render the method of Applicants' claim 1 obvious. For example, there are advantages of the method of Applicants' claim 1 that are not contemplated by UIML. Using the method of Applicants' claim 1 with devices of various types, such as a first type or a second type, assemblies of two or more objects may be displayed according to a presentation pattern that defines a relation between the two or more objects, where the presentation pattern is identified according to the type of device, such that the assembly may be presented on the user interface in a manner particularly suited to that device. This goes far beyond, for example, providing a display in one language on a first device and a display in second language on a second device, as shown in figure 1 of UIML, which fails to capture any relationship between the objects or how the objects, and the data they present, may be optimally presented in an assembly according to a presentation pattern identified according to the type of the device from predefined first and second presentation patterns. The presentation pattern identified according to the type of the device from predefined presentation patterns, and the assembly of the objects according to the presentation pattern that are recited in claim 1 together provide sophisticated user-interface

presentation possibilities for content across devices of different types having different device-specific limitations, and do so in a flexible manner not contemplated by UIML.

Accordingly, claim 1 defines subject matter that is patentable over UIML.

Dependent claim 5 depends from claim 1, and thus is patentable over UIML for at least the reasons described above with reference to claim 1. Additionally, claim 5 recites "wherein the presentation pattern is identified according to the size of the screen." The Examiner contended, in rejecting claim 5, that UIML discloses this aspect at figure 1, figure 3, and related discussion, *see* Office Action page 13, and referred to the PC and PDA shown in figure 1 of UIML, *see* Office Action page 4. This is both misguided and insufficient. Figure 1 of UIML simply shows a block diagram having two devices, and describes one as presenting information in English and the other as presenting information in French. Figure 3 also shows two devices, but does not show or describe differences in presentation, let alone differences in presentation based on screen size, and nowhere in UIML are these aspects disclosed or suggested. As described above, UIML does not disclose or suggest predefined presentation patterns that define a relation between at least two objects, and certainly does not disclose or suggest identifying a presentation pattern based on size of the screen of the device. Without limitation, Applicants submit that this provides at least an additional reason why claim 5 defines subject matter that is patentable over UIML.

For at least these reasons, claim 1, and each of dependent claims 2-7, define subject matter that is patentable over UIML, and Applicants request that the Examiner remove the anticipation rejections of these claims.

Claim 8

Claim 8 has been amended in similar fashion to claim 1, and recites a computer-program product having instructions that when executed perform a method similar to the method of claim 1. The amendment adds no new matter. For at least the reasons discussed above with reference to claim 1, claim 8 defines subject matter that is patentable over UIML, and Applicants request that the Examiner remove the anticipation rejection of this claim.

Claims 9-14

Claim 9 is similarly patentable over UIML because UIML does not disclose or suggest all of the limitations recited in claim 9. For example, UIML does not disclose or suggest a method that includes "customizing a workbench component that identifies constraints on the validity of the application specification document." The Examiner contended, in rejecting claim 9, that figure 1, figure 3, and related discussion of UIML disclose this aspect of claim 9. *See* Office Action, pages 13-14. This is not correct. Neither figure 1 nor figure 3 of UIML show a workbench component or anything resembling a workbench component, and no mention or suggestion is made in UIML of identifying constraints on the validity of the application specification document. Furthermore, claim 9 recites "rendering a first object and a second object on the user interface of the device using the user interface model according to one of the layout themes for the device." UIML also fails to disclose or suggest this aspect of Applicants' claim 9. Neither are these aspects of claim 9 obvious in view of UIML, for reasons described above with reference to claim 1.

For at least these reasons, claim 9 defines subject matter that is patentable over UIML, as do each of dependent claims 10-14, and Applicants request that the Examiner remove the anticipation rejections of these claims.

CONCLUSION

Applicants submit that all pending claims 1-14 are in condition for allowance and request that the Examiner issue a notice of allowance.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please charge Deposit Account No. 06-1050 in the amount of $120 for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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